



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

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STATE WATER CONTROL BOARD ENFORCEMENT ACTION – ORDER BY CONSENT ISSUED TO UNITED STATES DEPARTMENT OF THE NAVY FOR NAVAL AIR STATION OCEANA – DAM NECK ANNEX Unpermitted Discharge

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code § 62.1-44.15, between the State Water Control Board and the United States Department of the Navy, regarding the Naval Air Station Oceana, Dam Neck Annex, for the purpose of resolving certain violations of the State Water Control Law and the applicable regulation.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "BL1821[®]" is a commercial product manufactured by ChemTreat, Inc. used to inhibit bacteria growth in closed-loop systems. Its active ingredient is sodium nitrite.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and 62.1-44.7.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
4. "Dam Neck" or "Facility" means Naval Air Station Oceana, Dam Neck Annex, with the listed address of 1922 Regulus Avenue, Virginia Beach, Virginia.

5. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
6. "Lake Tecumseh" is a 261-acre lake owned by the Hampton Roads Sanitation District ("HRSD") as an operational buffer between the "Atlantic" waste water treatment plant and nearby residential neighborhoods. HRSD reportedly purchased the lake from a private owner in March 2007. While Lake Tecumseh is privately owned, it is used occasionally by members of the public for recreational boating and fishing. Lake Tecumseh is very shallow (less than two-foot average depth) and occasionally empties of water due to meteorological influences (winds and tides).
7. "Navy" means the United States Department of the Navy. The Navy is a "person" within the meaning of Va. Code § 62.1-44.3.
8. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.
9. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the State Water Control Law.
10. "Permit" means a VPDES Permit issued under the State Water Control Law and the Regulation.
11. "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. 9 VAC 25-31-10.
12. "Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution." Va. Code § 62.1-44.3.
13. "Regulation" means the VPDES Permit Regulation, 9 VAC 25-31-10 *et seq.*

14. "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 *et seq.*) of Title 62.1 of the Va. Code.
15. "State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands. Va. Code § 62.1-44.3.
16. "TRO" means the Tidewater Regional Office of DEQ, located in Virginia Beach, Virginia.
17. "Va. Code" means the Code of Virginia (1950), as amended.
18. "VAC" means the Virginia Administrative Code.
19. "VPDES" means Virginia Pollutant Discharge Elimination System.

SECTION C: Findings of Fact and Conclusions of Law

1. Dam Neck is a Navy installation located in Virginia Beach, Virginia, that, in general, supports naval training activities.
2. Heating and air conditioning to most of the Facility's buildings is provided by a closed-loop system in which heat from the individual geothermal heat pumps in each building is transferred to a heat-exchange medium, which is mostly water, that circulates throughout the closed-loop system. The heat absorbed by the heat-exchange medium is transferred to non-contact cooling water through a series of heat exchangers located in a central operations building operated by a contractor. The entire closed-loop system contains approximately 680,000 gallons of liquid heat-exchange medium. The main pipe that circulates the liquid heat-exchange medium throughout the Facility is located underground, except outside Buildings 508 and 510 where it connects to the heat-exchange pipes that service individual buildings at above-ground risers.
3. BL1821[®] is injected into the heat-exchange medium at the heat exchangers. The system operator maintains a level of sodium nitrite in the liquid heat-exchange medium of approximately 500 parts per million.
4. On August 10, 2009, a Dam Neck representative reported to DEQ the discharge of approximately 240,000 gallons of liquid heat-exchange medium, containing about 1,200 pounds of sodium nitrite, from a broken pipe near Dam Neck Building 508 that had occurred on August 8, 2009. While some of the liquid soaked into the ground in the vicinity of Building 508, an unknown quantity discharged to Lake Tecumseh by way of a storm drain and storm-water drainage ditch.
5. A Facility representative submitted a written report to DEQ on August 12, 2009, that confirmed the initial report that 240,000 gallons of liquid heat-exchange medium

(containing approximately 1,200 pounds of sodium nitrite) had discharged from the broken pipe. The break was attributed to the failure of a transition flange at the above-ground riser outside Building 508 where the main pipe connects to the pipes that service individual buildings. That flange had since been repaired. The break was noted by an on-site control room operator due to a sudden loss of heat-exchange system pressure.

6. Analyses of water samples taken from the storm-water ditch on the Facility nearest Building 508 where the discharge had occurred and at several locations on Lake Tecumseh on August 12, 2009, (four days after the discharge) showed no apparent impact on water chemistry from the discharge. There were also no reports of dead fish or other aquatic life.
7. TRO issued NOV No. 2010-T-0094 dated August 19, 2009, for the unpermitted discharge to State waters of "approximately 240,000 gallons of condensate water/sodium nitrate (sic) solution (500 ppm/1,200 pounds)" and for the failure to report that discharge to DEQ within 24 hours of its occurrence.
8. DEQ enforcement staff met with representatives of the Facility on September 15, 2009, to familiarize themselves with the Facility's closed-loop heat-exchange system and to confirm the repair of the transition flange that had failed.
9. Va. Code § 62.1-44.5(A) states that "[E]xcept in compliance with a certificate issued by the Board, it is unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances."
10. The Regulation, at 9 VAC 25-31-50(A), also states that except in compliance with a VPDES permit, or another permit issued by the Board, it is unlawful to discharge into state waters sewage, industrial wastes, or other wastes.
11. Va. Code § 62.1-44.5(B) states that "Any person in violation of the provisions of [Va. Code § 62.1-44.5(A)] who discharges or causes or allows (i) a discharge of sewage, industrial waste, other wastes, or any noxious or deleterious substance into or upon state waters, or (ii) a discharge that may reasonably be expected to enter state waters shall, upon learning of the discharge, promptly notify, but in no case later than 24 hours the Board, the Director of [DEQ], or the [local] coordinator of emergency services."
12. The Regulation, at 9 VAC 25-31-50(B), also requires that a person who discharges into state waters sewage, industrial wastes, or other wastes to notify DEQ within 24 hours of discovery of the discharge.
13. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
14. The Department has issued no permits or certificates to the Navy for the Facility.
15. BL1821[®], which contains sodium nitrite, is considered a pollutant under 9 VAC 25-31-10 of the Regulation because it may cause or contribute to pollution of State waters.

BL1821® is also considered an "other waste" under Va. Code § 62.1-44.3 because it is a chemical or substance that may cause pollution in State waters. BL1821® is toxic to aquatic life and moderately harmful to public health through ingestion, inhalation, or direct contact.

16. Lake Tecumseh is located in the Chowan River/Dismal Swamp Basin and is not listed in DEQ's 305(b) report as impaired. Lake Tecumseh is considered "state" waters under § 62.1-44.3 of the Code of Virginia.
17. Based on the results of documentation submitted on August 10, 2009, and August 12, 2009, and the September 15, 2009, meeting the Board concludes that the Navy has violated Va. Code 62.1-44.5 and 9 VAC 25-31-50, by discharging sodium nitrite from the Facility to State waters without a permit and by failing to report that discharge within 24 hours of its occurrence, as described in paragraphs C(4) through C(16), above.
18. Documentation submitted by the Navy and the Facility inspection by DEQ staff on September 15, 2009, verified that the violations as described in paragraphs C(4) through C(16), above, have been corrected.
19. In order for the Navy to remain in compliance, DEQ staff and Navy representatives have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it pursuant to Va. Code § 62.1-44.15, the Board orders the Navy, and the Navy agrees to perform the actions described in Appendix A of this Order.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of the Navy for good cause shown by the Navy, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.

3. For purposes of this Order and subsequent actions with respect to this Order only, the Navy admits to the jurisdictional allegations, and agrees not to contest, but does not admit, the findings of fact and conclusions of law in this Order.
4. The Navy acknowledges that any civil action taken by the Board to enforce the terms of this Order will be in the Circuit Court of the City of Richmond. However, the Navy does not waive any rights it may have to seek removal of such action to Federal court pursuant to 28 United States Code §§ 1441 *et seq.*
5. The Navy declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 2.2-4000 *et seq.*, and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by the Navy to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. The Navy shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. The Navy shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. The Navy shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of any such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the Navy intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and the Navy. Nevertheless, the Navy agrees to be bound by any compliance date which precedes the effective date of this Order.
11. This Order shall continue in effect until:
 - a. the Navy petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to the Navy.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Navy from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. In accordance with the Federal Anti-Deficiency Act, the obligations of the Navy under this section are expressly conditioned on the availability of Congressional appropriations, which the Navy agrees to seek in amounts sufficient to timely accomplish these undertakings. If sufficient appropriations are not available and cannot be obtained, the Navy will promptly inform the DEQ Regional Director. In such case, the Director may terminate the Order and take other action, if so desired, or amend the Order with the Navy's consent or in accordance with the Administrative Process Act.
13. Any plans, reports, schedules or specifications attached hereto or submitted by the Navy and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
14. The undersigned representative of the Navy certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the Navy to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the Navy.
15. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no

representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.

16. By its signature below, the Navy voluntarily agrees to the issuance of this Order.

And it is so ORDERED this _____ day of _____, 2010.

Francis L. Daniel, Regional Director
Department of Environmental Quality

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Consent Order

United States Department of the Navy Re: Dam Neck Annex, Unpermitted Discharge

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The Commanding Officer, Naval Air Station Oceana, voluntarily agrees to the issuance of this Order for the United States Department of the Navy.

Date: 21 Apr 10 By: [Signature] Acting CO
(Person) (Title)
Commanding Officer, Naval Air Station Oceana

Commonwealth of Virginia

City/County of Virginia Beach

The foregoing document was signed and acknowledged before me this 21st day of April, 2010, by James Douglas Webb who is signing on behalf of the United States Department of the Navy.

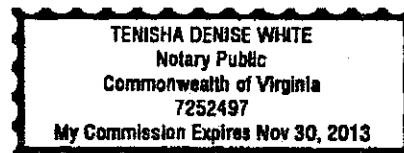
[Signature]
Notary Public

7252497

Registration No.

My commission expires: 30 Nov 13

Notary seal:



APPENDIX A SCHEDULE OF COMPLIANCE

The Navy shall:

1. Within 90 days of the effective date of this Order submit to DEQ Tidewater Regional Office, for review and approval, a corrective action plan ("plan") and schedule that fully examines the root cause of the release of sodium nitrite to State waters on August 8, 2009, and describes actions the Navy has taken and plans to take to prevent future releases from the Facility's closed-loop heat-exchange system and to mitigate environmental damage in the event a release does occur. Upon approval, the plan and schedule shall become a part of and enforceable under the terms of this Order.
2. By January 15, 2011; July 15, 2011; January 15, 2012; and July 15, 2012, submit to DEQ Tidewater Regional Office reports of any releases to the environment of liquid heat-exchange medium from the Facility's closed-loop heat-exchange system and any inspections, repairs, or maintenance performed on the system during the preceding six-month period. Reports are required even if no releases or inspection, repair and maintenance activity occurred during the semi-annual reporting period.
3. Unless otherwise specified in this Order, the Navy shall submit all requirements of Appendix A of this Order to:

Regional Director
DEQ, Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462